

IN THE CLAIMS

Please amend claims 1 and 3 through 6, as follows:

Sub 1
Sub 2
C1

1. (Twice Amended) A memory system, comprising
a plurality of defect-adaptive memory devices, each of said plurality of defect-adaptive
memory devices having a first region and a second region, said first region for sequentially storing
parity information needed for data recovery [in a first region of a recording medium in the form
of blocks,] and [storing data in a] said second region for storing data [other than said first region];
a plurality of caches, each of said plurality of caches being respectively connected to a
corresponding one of said plurality of defect-adaptive memory devices, each of said plurality of
caches for storing parity information [blocks] needed for data recovery for a corresponding one
of said plurality of defect-adaptive memory devices [, the information blocks being read from a
predetermined memory device]; and
a controller connected to each defect-adaptive memory device of said plurality of defect-
adaptive memory devices and to each corresponding cache of said plurality of caches that is
respectively connected to a corresponding one of said plurality of defect-adaptive memory devices,
said controller for selectively controlling writing and reading of parity information needed for
data recovery in said first region of each corresponding one of said plurality of defect-adaptive
memory devices [each memory device], for selectively obtaining parity information needed for
data recovery from said first region of each corresponding one of said plurality of defect-adaptive
memory devices [each memory device], and for selectively storing [the obtained] parity
information needed for data recovery obtained from said first region of a corresponding one of said

BM

20 plurality of defect-adaptive memory devices in a predetermined corresponding one of said plurality
21 of caches.

Sub 1
Sub 2
Sub 3
3. (Twice Amended) The memory system of claim 1, further comprised of [said information
2 blocks in which] the parity information needed for data recovery [is] being stored and being
3 sequentially arranged from the most outer cylinder on [said] a recording medium in each
4 corresponding one of said plurality of defect-adaptive memory devices.

PS
4. (Twice Amended) The memory system of claim 3, further comprised of [said] parity
2 information needed for data recovery being modified to a value obtained through a calculation of
3 new data recovery information.

1 5. (Twice Amended) The memory system of claim 4, further comprised of [said] parity
2 information needed for data recovery being obtained by exclusive-ORing of previous data,
3 [recovery] parity information [with relation] corresponding to the previous data, and new data.

1 6. (Twice Amended) A redundant array of inexpensive disks (RAID) system, comprising:
2 a plurality of disk drives, each of said plurality of disk drives including a region having
3 [consisting] a plurality of data blocks for storing data and another region having a predetermined
4 number of parity blocks for storing parity information needed for data recovery;
5 a plurality of caches, each of said plurality caches being respectively connected to a

Sub
E1
7 corresponding one of said plurality of disk drives for storing parity information needed for data recovery; and

8 a controller functionally connected to each disk drive of said plurality of disk drives and to
9 each corresponding cache of said plurality of caches for selectively controlling a write operation
10 of data and parity information needed for data recovery in each corresponding disk drive of said
11 plurality of disk drives by a process of:

12 [calculating a target location of] determining a predetermined disk drive of said
13 plurality of disk drives upon receipt of a data writing instruction from a host computer;

14 3 reading old data from the predetermined disk drive of said plurality of disk drives;

15 determining whether old parity information corresponding to the old data [read
16 from] corresponding to the predetermined disk drive of said plurality of disk drives is [hit]
17 accessed in a corresponding cache of said plurality of caches;

18 upon the old parity information [read from] corresponding to the predetermined disk
19 drive of said plurality of disk drives not being [hit] accessed in the corresponding cache of
20 said plurality of caches, reading the old parity information from the predetermined disk drive
21 of said plurality of disk drives and [updating] loading [a] the corresponding cache of said
22 plurality of caches with the old parity information, and then said controller performing the
23 following process[, and upon the old parity information to be read from the predetermined
24 disk drive being hit in the corresponding cache, merely performing the following process
25 without updating a cache;];

26 obtaining new parity information by performing an exclusive OR operation

27 *Sub E1* [between] on [read] the old data, the old parity information and new data;

28 *3* loading [updating] the corresponding cache of said plurality of caches with the new

29 parity information [cache table]; and

30 *4* writing the new data in said region for storing data in the predetermined disk drive

31 of said plurality of disk drives and writing the new parity information in [the target location

32 of a] said another region for storing parity information in the predetermined disk drive of

33 said plurality of disk drives.